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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/653,216	09/03/2003	Takanori Masui	116970	2609

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EXAMINER
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GELAGAY, SHEWAYE

ART UNIT	PAPER NUMBER
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2137

DATE MAILED: 11/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/653,216	MASUI ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Shewaye Gelagay	2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 September 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/3/03, 11/25/05, 1/5/06</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

1. Claims 1-18 have been examined.

### ***Specification***

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 9 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in

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the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 9 recites, "a security level setting module" which is not described in the specification. The applicant has disclosed the internal key management module reads the security setting value. (page 15, lines 7-9) However, there is not enough information in the disclosure so that one of ordinary skill in the art at the time the invention was made would have known what "a security level setting module" is. The applicant in the original application at the time of the filing has not described "a security level setting module".

5. Claim 10 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 10 recites, "a region setting module" which is not described in the specification. There is not enough information in the disclosure so that one of ordinary skill in the art at the time the invention was made would have known what "a region setting module" is. The applicant in the original application at the time of the filing has not described "a region setting module".

6. Claims 14 and 15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 14 and 15 recite, "deciding means"

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which is not described in the specification. There is not enough information in the disclosure so that one of ordinary skill in the art at the time the invention was made would have known what "deciding means" is. The applicant in the original application at the time of the filing has not described "deciding means"

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claim 15 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 15 recite, "deciding means decides to encrypt when data inputted by the data input interface is encrypted." Applicant has taught in the specification to perform decryption when the data inputted is encrypted and then. decryption module for decrypting encrypted data inputted by the data input interface and an encryption module for encrypting data decrypted by the decryption module using a key different from the first encryption key. (pages 3, lines 23-28) It is unclear whether the encrypted data is encrypted after decryption or if the encrypted data is re-encrypted. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1, 3, 14-16 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Davis U.S. Patent 5,805,706.

As per claims 1 and 17:

Davis teaches an information processing device comprising:

a data input interface for inputting encrypted data; (Figure 2A; col. 2, lines 36-38)

a decryption module for decrypting encrypted data inputted by the data input interface using a decryption key forming a pair with a first encryption key used to encrypt the data; (Figure 2A, item 143; col. 3, lines 10-25; col. 4, lines 30-36)

an encryption module for encrypting data decrypted by the decryption module using a second encryption key different from the first encryption key; (Figure 2A, item 144; col. 4, lines 37-40) and

a storage device for storing data encrypted by the encryption module. (col. 4, lines 40-43)

As per claim 3:

Davis teaches all the subject matter as discussed above. In addition, Davis further discloses wherein the data input interface also inputs unencrypted data, (Figure 2A; col. 2, lines 36-38) and the encryption module also encrypts unencrypted data input by the data input interface. (Figure 2A, item 144; col. 4, lines 37-40)

As per claims 14-15:

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Davis teaches all the subject matter as discussed above. In addition, Davis further discloses deciding means for deciding whether or not to encrypt data inputted by the data input interface, wherein the encryption module encrypts data decided upon for encryption by the deciding means. (Figure 2A, item 144; col. 4, lines 37-40)

As per claim 16:

Davis teaches all the subject matter as discussed above. In addition, Davis further discloses a printer for decrypting and printing data stored in the storage device. (col. 3, line 51-col. 4, line 3)

### ***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Davis U.S. Patent 5,805,706 in view of Saito U.S. Patent 7,093,295.

As per claim 4:

Davis teaches all the subject matter as discussed above. Davis does not explicitly disclose a key generator for generating the second encryption key. Saito in analogous art, however, discloses a key generator for generating the second encryption key. (col. 7, lines 49-57) Therefore, it would have been obvious to one ordinary skill in

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the art at the time the invention was made to modify the device disclosed by Davis with Saito in order to ensure the security for the information and for the key used by generating the key when necessary for decryption.

13. Claims 2, 5-13 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis U.S. Patent 5,805,706 in view of Saito U.S. Patent 7,093,295 and further in view of Blakley III, (hereinafter Blakley) U.S. Patent 5,677,952.

As per claims 5 and 18:

The combination of Davis and Saito teaches all the subject matter as discussed above. Both references do not explicitly disclose a memory controller for storing the second encryption key in the volatile memory. Blakley in analogous art, however, discloses a memory controller for storing the second encryption key in the volatile memory. (col. 6, lines 48-57) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the device disclosed by Davis and Saito with Blakley in order to erase secret keys when the authorized user powers off the device. (col. 6, lines 48-57; Blakley)

As per claim 6

The combination of Davis and Saito teaches all the subject matter as discussed above. Both references do not explicitly disclose wherein the key generator generates the second encryption key using information characteristic to the device itself. Blakley in analogous art, however, discloses wherein the key generator generates the second encryption key using information characteristic to the device itself. (col. 5, lines 41-60) Therefore, it would have been obvious to one ordinary skill in the art at the time the



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invention was made to modify the device disclosed by Davis and Saito with Blakley in order to enhance the security of the key by utilizing an identification that is unique to each device. (col. 6, lines 48-57; Blakley)

As per claims 2 and 7:

The combination of Davis and Saito teaches all the subject matter as discussed above. Both references do not explicitly disclose wherein the key generator generates the second encryption key when power to the device is turned on. Blakley in analogous art, however, discloses wherein the key generator generates the second encryption key when power to the device is turned on. (col. 6, lines 48-57) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the device disclosed by Davis and Saito with Blakley in order to erase secret keys when the authorized user powers off the device. (col. 6, lines 48-57; Blakley)

As per claims 8-10:

The combination of Davis and Saito teaches all the subject matter as discussed above. Both references do not explicitly disclose a media reader capable of being installed with a removable portable storage media storing key generation parameters for reading a key generation parameter stored on the installed portable storage media, wherein the key generator generates the second encryption key using the key generation parameter. Blakley in analogous art, however, discloses a media reader capable of being installed with a removable portable storage media storing key generation parameters for reading a key generation parameter stored on the installed portable storage media, wherein the key generator generates the second encryption key

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using the key generation parameter. (col. 5, lines 41-60) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the device disclosed by Davis and Saito with Blakley in order to enhance the security of the key by utilizing an identification that is unique to each device. (col. 6, lines 48-57; Blakley)

As per claims 11 and 12:

The combination of Davis and Saito teaches all the subject matter as discussed above. Both references do not explicitly disclose a media reader capable of being installed with a removable portable storage media storing the encryption key, wherein the encryption module reads the second encryption key from the portable storage media installed in the media reader and performs encryption. Blakley in analogous art, however, discloses a media reader capable of being installed with a removable portable storage media storing the encryption key, wherein the encryption module reads the second encryption key from the portable storage media installed in the media reader and performs encryption. (col. 4, lines 40-65) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the device disclosed by Davis and Saito with Blakley in order to enhance the security of the key by utilizing an identification that is unique to each device. (col. 6, lines 48-57; Blakley)

As per claim 13:

The combination of Davis and Saito teaches all the subject matter as discussed above. Both references do not explicitly disclose having encryption keys corresponding to each user using the device, wherein the encryption module performs encryption using

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an encryption key for the user corresponding to the data. Blakley in analogous art, however, discloses having encryption keys corresponding to each user using the device, wherein the encryption module performs encryption using an encryption key for the user corresponding to the data. (col. 6, lines 48-57) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the device disclosed by Davis and Saito with Blakley in order to erase secret keys when the authorized user logs off. (col. 6, lines 48-57; Blakley)

### ***Conclusion***

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See Form PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shewaye Gelagay whose telephone number is 571-272-4219. The examiner can normally be reached on 8:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on 571-272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Shewaye Gelagay

  
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SUPERVISORY PATENT EXAMINER